

CLAIMS

1. Optoelectronic coupling device comprising a package (2) provided with an optical port (3) to receive terminations (4) of optical fibers (5), a mirror 5 in a cavity to reflect light rays coming from or intended for these optical fibers and an optoelectronic circuit (8) to convert these light rays into electrical signals or vice versa, characterized by the fact that the package is made of plastic and that the mirror is capable of focusing at a finite distance and that the optoelectronic circuit is mounted on the package by reflow soldering (20, 10 24) of solder beads and comprises an intermediate integrated circuit (21) surmounted by means of reflow soldering with solder beads, detection or transmission circuits (19) being spaced out at the pitch of the grooves of the package.
2. Device according to the claim 1, comprising sections (27) of 15 intermediate optical fibers.
3. Device according to one of the claims 1 to 2, characterized by the fact the mirror is parabolic (14).
4. Device according to one of the claims 1 to 3, characterized by the fact the mirror is metallised.
- 20 5. Device according to one of the claims 1 to 4, characterized by the fact the package comprises metallised tracks (28).
6. Device according to one of the claims 1 to 5, characterized by the fact the package has V-grooves (16).
7. Device according to one of the claims 1 to 6, characterized by the 25 fact the curvature of the mirror is adapted to the single-mode or multimode character of the light signals.
8. Device according to one of the claims 1 to 7, characterized by the fact the mirror is concave curved.
9. Device according to one of the claims 1 to 8, characterized by the 30 fact the plastic material of the package is a high-temperature plastic material, made, for example, of liquid-crystal polymer, polybutylene terephthalate, cyclic olefin copolymer or polyimide.